

NEW YORK
state department of
HEALTH

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December 27, 2013

Arlene Anderson, Chief
Clean Water Division
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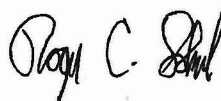
Re: Public Water System Supervision Program
End of Year Performance Report
Federal Fiscal Year 2013

Dear Ms. Anderson:

Enclosed is our Federal Fiscal Year (FFY) 2013 Public Water System Supervision Program (PWSS) End of Year performance status report, prepared in accordance with our PWSS Work Plan.

If you have any questions, please call me at (518) 402-7650.

Sincerely,



Roger C. Sokol, Ph.D.
Director
Bureau of Water Supply Protection

Enclosure

ecc: N. Graber, M.D.
M. Cambridge
T. Boepple-Swider
BWSP Section Chiefs

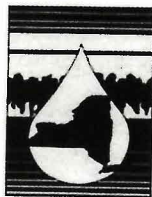
cc: B. Lin – EPA Region 2
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STATE OF NEW YORK
DEPARTMENT OF HEALTH



**PUBLIC WATER SYSTEM SUPERVISION
(PWSS) PROGRAM**

End of Year Report
Federal Fiscal Year 2013



December 2013

**PUBLIC WATER SYSTEM SUPERVISION (PWSS) PROGRAM
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GOAL 1: TO ASSURE THAT WATER SUPPLIERS ARE IN COMPLIANCE WITH THE STATE SANITARY CODE AND THAT AN ADEQUATE QUANTITY OF POTABLE, AESTHETICALLY PLEASING DRINKING WATER IS DELIVERED BY PUBLIC WATER SUPPLIES.

1. Assure compliance with Part 5 of the SSC by:

- A. Initiating timely and appropriate action against all significant non-compliers (SNCs), by bringing SNCs into compliance or negotiating a voluntary signed compliance schedule or initiating formal legal proceedings within six months of discovery, including reviewing quarterly Enforcement Targeting Tool (ETT) reports as provided by the U.S. Environmental Protection Agency (USEPA), and reporting on the status of unresolved SNCs to USEPA on a quarterly basis.

*STATUS: The New York State Department of Health (NYSDOH), Bureau of Water Supply Protection (BWSP) submitted quarterly SNC status reports to USEPA as required. The following is a summary of compliance activities during the reporting period:
Systems returned to Compliance – 155
Enforcement Action Taken – 172*

- B. Immediately responding to all acute violations (nitrate, E. coli, etc.), including assuring that appropriate corrective actions are taken, appropriate public advisories are issued within 24 hours, and problem alerts are issued as needed.

STATUS: Immediate response was made for all acute violations. Fifty-nine (59) problem alerts were prepared and issued by Field and BWSP staff. Ten (10) of the problem alerts were for a microbiological event involving E. coli. Forty-six (46) of the 59 problem alerts were for failed infrastructure/equipment with the vast majority being water main breaks.

In addition to the incidents noted above, in the aftermath of Superstorm Sandy field and BWSP staff provided direct assistance to affected water systems and communities. Many water systems were adversely impacted by the storm. A total of sixty-two (62) community water systems initiated drinking water advisories: Fifty-nine (59) of these systems were required to operate under boil water notices and three systems issued "Do Not Use/Drink" advisories. Non-community water systems with drinking water advisories were handled at the local health department (LHD) level; these were not tracked by the BWSP. The NYSDOH maintained a dedicated web page for citizens that included information on the status of public water systems and guidance for private well owners in the aftermath of the storm. The web page was updated as often as twice daily and provided the status of boil water notices at community water systems and information on boiling water. The BWSP also provided the assembled information to the NYS Office of Emergency Management (OEM) through the Department's seat at the NYS Emergency Operations Center (EOC).

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- C. Investigating all reports of possible waterborne disease outbreaks and reporting identified outbreaks to the Centers for Disease Control and Prevention (CDC).

STATUS: Staff is prepared to investigate all possible waterborne disease outbreaks, report identified outbreaks, and review engineering studies that are proposed to address and mitigate any outbreak. With the support of a CDC grant, the National Waterborne Outbreak Reporting (NORS) mechanism is fully operational. Internally, NYSDOH has also developed an interface – Outbreak Management Solution (OMS) – that is being used by the central office and LHD staff to accumulate outbreak information on a statewide basis. As part of the CDC EHS-Net Water grants, BWSP staff worked with Division staff to update the Environmental Health Manual Items providing guidance on responding to waterborne disease outbreak, bulk and bottled water, roadside springs and drinking water complaints.

Seven (7) legionellosis outbreaks were reported to NORS for the current and previous years. Only one outbreak is in the current reporting period. The legionellosis outbreak reports in NORS for 2011-2012 have been completed. Data gathered using environmental assessment forms (EAF) for the investigation of legionellosis events occurring in regulated health care facilities are being analyzed. An Access database has been developed and inter-relationships for groups of questions in the EAF have been established. The objective is to determine the utility of the form for contributing to positive health outcomes for patients/residents and positive resolutions for facility vulnerabilities. EAFs for approximately 50 regulated facilities have been entered into this dedicated database.

- D. Conducting annual reviews and sanitary surveys at all public water systems granted a waiver from disinfection.

STATUS: During the reporting period, there were 1037 sanitary surveys and/or site visits conducted at public water systems (PWSs) that maintain a valid waiver from disinfection. There are currently 1,384 PWSs with a disinfection waiver.

- E. Reviewing operation reports submitted by public water suppliers, identifying violations and other problems that require follow-up.

STATUS: During the period October 1, 2012 through September 30, 2013 over 68,500 operation reports were received and reviewed by BWSP and LHD staff with appropriate follow up actions taken where required. BWSP and LHD staff also reviewed over 1130 operation reports on the use of fluoride by public water systems across the State. This information was shared with the NYSDOH Bureau of Dental Health for review and entry into the federal Water Fluoridation Reporting System (WFRS). Data in WFRS can be viewed by the public, dental professionals, and public health staff to assist in determining the level of fluoride prophylaxis necessary.

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- F. Assuring Annual Water Quality Reports are issued when required.

STATUS: *A total of 1,786 AWQRs for calendar year 2012 were received. Nineteen (19) Notices of Violation (NOV's) were issued for AWQR reports that were overdue.*

2. Coordinate with Wadsworth Center for Laboratories and Research (WCLR) to assure that State Laboratory capabilities are maintained by:

- A. Maintaining USEPA certification of the State Laboratory for all analyses required under the Safe Drinking Water Act (SDWA), including participation in water supply proficiency testing (WSPT) studies conducted by approved providers.

STATUS: *In a letter dated August 29, 2013, USEPA Region 2 affirmed the certification status of the NYSDOH laboratories under the SDWA. The laboratories have current National Environmental Lab Approval Program (NELAP) accreditation for the environmental analyses of drinking water.*

- B. Maintaining implementation of the lab certification program for laboratories performing drinking water analyses, per primacy requirements.

STATUS: *The NYSDOH continues to maintain implementation of the Environmental Laboratory Approval Program (ELAP). To become certified, a laboratory must be directed by an individual who is qualified through education and experience and perform satisfactorily in at least semi-annual proficiency testing and a biennial on-site inspection. More detailed information on this program is available at:
<http://www.wadsworth.org/labcert/elap/elap.html>*

- C. Maintaining and updating, as necessary, a Quality Assurance Management Plan (QAMP).

STATUS: *The BWSP submitted a revised QAMP, which covers the five-year period from FY2013-FY2018 to the USEPA Region 2 on May 8, 2013 which was reviewed and endorsed on June 20, 2013. In addition, USEPA Region 2 conducted an assessment of the BWSP Quality System on July 17, 2013 and found the BWSP is adequately implementing its quality system.*

- D. Conducting special surveillance sampling for bacteriological parameters, as well as inorganic and organic chemicals at public water systems.

	<u>Planned</u>	<u>To Date</u>
Bacteriological	9,600	10,557
Inorganic Chemicals	2,000	1,953
Organic Chemicals	700	549
Radiologicals	50	41

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STATUS: Surveillance sampling for bacteriological and SOC/IOC/VOC parameters continued as scheduled. Approximately 10,557 bacteriological, 1,953 inorganic, 549 organic and 41 radiological samples were analyzed in the reporting period.

3. Provide technical assistance to public water systems in achieving compliance by:

- A. Responding to requests and inquiries regarding technical assistance, rule interpretation, or guidance, including responding to consumer complaints.

STATUS: NYSDOH and LHD staff provided technical assistance and/or guidance to numerous regulated public water systems; all consumer complaints were addressed. Field and BWSP staff responded to hundreds of calls and emails from consumers and water purveyors.

- B. Determining compliance with existing regulations and promoting improved operation of public water systems by conducting periodic sanitary surveys.

STATUS: The following summary is based on a count of sanitary surveys completed for the period October 1, 2012 – September 30, 2013.

<i>Type of PWS</i>	<i># of Surveys</i>
CWS**	1725
NTNCWS	469
TNCWS	3494

***Includes the following types of CWS: Municipal, Purchase, Surface w/ treatment, Avoidance, Groundwater*

- C. Providing technical project assistance (e.g., fluoridation, DWSRF) to public water systems.

STATUS: Field and BWSP staff provided direct technical assistance to dozens of small public water systems on design and operational problems. The technical assistance program provided on-site technical evaluation of fluoridation processes at water systems to help them maintain optimal fluoride levels. Fifteen (15) systems received on site fluoridation assessments during the reporting period. Four (4) full day drinking water training sessions on fluoridation for operators were held across the State.

- D. Directing provision of small system technical assistance (TA) through third party contract.

STATUS: BWSP staff continued to direct the small systems TA contractor. BWSP staff succeeded in executing a new five year contract of TA assistance from the low bidder in a Request for Proposal (RFP) bid process. The successful bidder was New York Rural

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Water. The new contract will cover five years (from July 1, 2013 to June 30 2018), with the potential for extensions for another two years.

During the period of October 1, 2012 to September 30, 2013, there were 222 site visits performed and 6 days of training conducted by the TA contractor representing over 3,376 man-hours of service.

4. Assure public health protection at public water systems using surface water sources by:

- A. Assuring unfiltered community and non-community surface water supplies follow established avoidance determinations, compliance schedules, exemption approvals, or stipulations to meet filtration mandates, including annual sanitary surveys.

STATUS: As of September 30, 2013, seven (7) CWSs and one (1) Non-Community Water System remain out of compliance with the Surface Water Treatment Rule (SWTR). Compliance schedules exist for five (5) of the CWSs. There were nineteen (19) Ground Water Under the Direct Influence [of Surface Water] (GWUDI) systems out of compliance with the SWTR. Compliance schedules exist for five (5) of these systems.

- B. Completing Comprehensive Evaluations (CPEs) at 2 to 3 existing community water treatment plants each year.

STATUS: Due to travel and other resource constraints, no CPEs at community water system filtration plants were done in FFY 2013. One final CPE report for work done during FFY 2012 is in draft. Assistance was provided for one Focused Performance Evaluations (FPE's) done by a NYS DOH District Office during the reporting period. Laboratory and technical assistance were provided to the District Office as it assisted a community water system with a filtration media evaluation. [FPEs assess specific operational issues including filter media evaluations, Disinfection by-product and disinfection assessments, and Total Organic Carbon (TOC) and/or color problems.]

- C. Conducting 2 to 3 follow-up visits at communities that had a full CPE to determine the degree of implementation of the recommendations, to discuss any new difficulties at these facilities, or to support communities who are having a specific critical problem.

STATUS: Due to travel restrictions and other resource constraints, no follow-up efforts were completed with the operators or managers for systems that received a recent CPE.

5. Assure public health protection by developing, adopting and implementing mandatory federal drinking water regulations into State Sanitary Code, including development and submittal of primacy packages, for:

- A. Groundwater Rule

STATUS: On January 18, 2013, EPA Region 2 published in the Federal Register the tentative approval of the revision to the Public Water Supervision Program for New York

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to implement the Ground Water Rule. Notices of the tentative approval and opportunity for public hearing were published in the Buffalo News, Albany Times Union and the Long Island Newsday on January 28, 2013. No request for public hearing was received and primacy for implementing the GWR was effective February 28, 2013.

B. Variance and Exemption Rule

STATUS: Regulatory process for adoption of remaining provisions of the Variance and Exemption Rule is ongoing.

C. Lead and Copper Rule Minor/Short-Term Revisions

STATUS: Regulatory process for adoption of the Lead and Copper Rule Minor/Short-Term revisions were initiated within the BWSP with adoption expected in near future.

D. Long Term 2 SWTR and Stage 2 Disinfectants and Disinfection By-Products Rule

STATUS: Regulatory process for adoption of LT2/Stage2 was initiated within the BWSP with adoption expected in near future. Successful collaborative efforts between NYSDOH and USEPA, Region 2 on implementation of the LT2/Stage2 continue.

E. Cross-Media Electronic Reporting Rule (CROMERR) will be adopted and implemented for eDWR under the limited set of requirements applicable to states that do not incorporate electronic signature requirements in their primacy package.

STATUS: The planned deployment of Electronic Drinking Water Reporting (eDWR) has been delayed. A new working group has been convened to facilitate implementation. Throughout this process, CROMERR standards have been considered and will be adopted and implemented when the eDWR application is operational.

F. Other Federal Regulations will be adopted into the State Sanitary Code and primacy packages will be submitted in an expeditious manner as these rules are federally promulgated.

STATUS: It is anticipated that the Revised Total Coliform Rule (RTCR) will be adopted into the New York State Sanitary Code (NYSSC) by the compliance date of April 1, 2016. It is also anticipated that the process to adopt the RTCR into the NYSSC will begin toward the end of 2014/beginning of 2015. Outreach efforts to PWSs have begun. Several presentations on the RTCR have been given to water operators, engineers, and elected officials.

G. Assist the U.S. EPA in the Implementation of the Unregulated Contaminant Monitoring Rule and developing alternative strategies for regulating contaminants.

STATUS: BWSP staff continues to assist USEPA Region 2 with implementing the Unregulated Contaminant Monitoring Rule (UCMR) by serving as the liaison between

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USEPA and the public water systems with updating sampling location and inventory information in the Safe Drinking Water Accession and Review System (SDWARS) database, and by providing technical assistance to the small public water systems for sampling protocols. Sampling for UCMR 3 began during this reporting period.

GOAL 2: ASSURE THAT LOCAL HEALTH DEPARTMENTS ARE FOLLOWING DEPARTMENT OF HEALTH POLICY FOR REGULATING PUBLIC WATER SUPPLIES.

1. Insure that local health department water supply programs properly implement the program by:

- A. Continuing to use SDWIS-State as reporting and management tool, including the training of regional staff and LHDs on SDWIS-web.

STATUS: The BWSP continues its highly effective policy of providing training to staff of LHDs via teleconferencing software. Multimedia conference calls involve not only staff of the LHDs and District Offices (user groups) but also the field coordinator staff (administration) assigned to a particular county or District Office. The Regional Environmental Health Directors (who oversee field coordination staff) as well as Center for Environmental Health (an administrative division of NYSDOH) staff received notification prior to the proposed training. This method has proven valuable as all interested parties will participate in training to the benefit of all involved.

Total system usage during the reporting period was approximately 196,000 sessions. This is approximately the same as the usage reported for the same period last year. The sustained use is credited to the efforts of regional field staff in promoting the new environmental health assessment protocol and performing reviews of the efficacy of LHDs based on the recommendations of the environmental health assessment tool. The number of staff with rights to use SDWIS application is similar to that reported in the previous year.

Presently, 833 users have rights to SDWIS including: system administration, data entry or inventory access. This does not account for the usage by those viewing SDWIS data through Drinking Water Watch (DWW) which has been optimized to allow for use by public and private water testing laboratories (to support eDWR) and eventually, by the general public.

- B. Continuing the development of usable management reports from SDWIS-State (i.e., compliance reports, etc.), and SDWIS Add-Ons.

STATUS: SDWIS quality checks support the promulgation of new rules and enhance the tracking efforts pertaining to existing rules. The number of total daily quality check categories remains at 107. The BWSP created the Enhanced Quality Report – that is, a highly detailed description of each error / quality category for use by the field. Each

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enhanced quality check provides the name of the quality check, describes what is checked, provides step-by-step instructions on correcting errors, and provides a description on how the error is created. Field coordinators have been provided with a spreadsheet containing all 107 enhanced quality checks to assist field staff with improving SDWIS data quality.

- C. Developing and implementing electronic water quality data exchange (electronic Drinking Water Reporting, eDWR), including becoming CROMERR compliant if applicable, for the direct reporting of laboratory data into the SDWIS database.

STATUS: Regarding the proposed deployment of Electronic Drinking Water Reporting (eDWR), a working group continues to review and facilitate the proposed implementation of eDWR. There is continued communication between the BWSP and State laboratory personnel on the implementation and deployment process.

- D. Developing and submitting annual compliance report by July 1.

STATUS: NYSDOH prepares a report of public water systems that had violations during the previous year to satisfy the requirements of Section 1414(c)(3) of the 1996 Amendments to the SDWA. New York submits data including public water supply inventory statistics, violations, and enforcement actions issued to violators to SDWIS/Fed on a quarterly basis. Tables in the report are based on data retrieved from NYSDOH databases maintained by each of the LHDs and district offices. The 2012 annual compliance report was posted to the Department's website on September 11, 2013.

- E. Conducting annual targeted audits of all LHDs.

STATUS: Field coordinators perform quarterly site visits to each county health department and/ or NYSDOH District Office located within their assigned area. Field coordinators provided written reports of findings and recommendations to LHDs in a timely manner.

- F. Continuing implementation of Drinking Water Enhancement (DWE) grants, including approving annual water work plans.

STATUS: The New York State 2013/2014 budget contained local assistance appropriations for the water supply protection program (i.e. DWE) program. Review and approval of 37 drinking water work plans through the DWE grant program ensures implementation of a full drinking water program at the local level.

- G. Continuing to provide training to LHDs for properly conducting sanitary surveys at public water systems with groundwater and/or surface water sources.

STATUS: Sanitary Survey training was presented to LHD staff by the Cadmus Group under contract with NYSDOH. A total of two (2) sessions were provided and consisted of one session on Sanitary Surveys at groundwater systems and one session on Sanitary

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Surveys at surface water systems.

Training on the SDWIS Web 2.1 and 2.2 Site Visit / Sanitary Survey application was provided to drinking water program staff at all levels. Instruction for optimal use of the application and review of basic sanitary survey procedures was provided. Follow-up and support on use of the application is available continuously through SDWIS Help Desk function with the BWSP.

H. Implementing recommendations made during the data verification audit.

STATUS: The BWSP continued to implement the recommendations resulting from the 2008 Data Verification Audit. Results of the 2008 audit have been shared with Regional staff; timetables specific to recommendations were produced, discussed and distributed to field coordinators in each region.

Specifically, the BWSP continued with training, program reviews and data verification at LHDs. Quality assurance (QA) programs are continually reviewed and updated (see enhanced quality descriptions), and staff was encouraged to enter all sample results and violation data into SDWIS in a timely manner. Local offices are encouraged to update sample schedule information. The BWSP continued to work on developing eDWR to help LHDs reduce the burden of data entry.

GOAL 3: ASSURE THAT WATER SUPPLIERS ARE ADEQUATELY PROTECTING THEIR SUPPLIES, ARE PLANNING FOR FUTURE NEEDS AND CONSTRUCTING FACILITIES TO ADEQUATELY COLLECT, STORE, TREAT AND DISTRIBUTE POTABLE AND AESTHETICALLY PLEASING WATER.

1. Assure that water supply facilities are built in accordance with proper design criteria by providing conceptual review and design approval of new construction and major modifications to water supply systems, including:

A. Engineering plans/reports and specifications, inclusive of pilot studies and corrosion control plans.

STATUS: Central office staff reviewed 131 projects related to drinking water infrastructure and issued 98 approvals of plans and 16 completed works approvals for prior approved projects. Field office staff and local county health department staff also continued to review and approve plans and issue approval of completed works for drinking water infrastructure projects. Central Office Staff provided guidance to field staff with respect to plan review standards. As an incentive to assist systems in protecting their supplies and planning for future needs, the NYSDOH provides funding through the drinking water state revolving fund (DWSRF) and during this reporting period successfully financed 34 projects totaling \$189 million including \$12 million in grants for disadvantaged communities. With respect to planning for future needs, the NYSDOH recently began requiring that for all DWSRF financed projects, if interconnection

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capability exists it must be the project selected unless from a capacity development viewpoint is demonstrated that it is disadvantageous to do so. In addition, all DWSRF projects require plans and specifications to be approved and also require a smart growth analysis in accordance with State law.

B. New processes

STATUS: No new processes were reviewed during the reporting period.

C. Cross connection control plans

STATUS: The central office, field office staff and LHD staff continued to review and approve cross control connection control plans that were submitted by public water suppliers. In addition, the central office continues to monitor to ensure quality control, the approximately 29 public water systems that have been delegated the approval authority for cross connection control plans for their systems.

D. Emergency Plans

STATUS: NYS Public Health Law requires all community water systems in New York that serve populations greater than 3,300 to update contact information in Vulnerability Assessments (VAs) and Emergency Response Plans (ERPs) annually and provide a full resubmission of their VAs and ERPs to the State every five (5) years. A total of 318 community water systems serving greater than 3300 people are required to submit VAs/ERPs. During the period October 1, 2012 through September 30, 2013, 114 water systems were required to submit VA/ERPs. By September 30th the BWSP had received 77 VA/ERPs. Additional submittals had been received by and were under review by the respective LHDs. Thirty-seven (37) of the 77 received by BWSP have received full approval with the remainder under review and/or revision.

In December 2012 NYSDOH granted a 60-day extension of any January 1, 2013 deadlines for submission of ERPs to all counties impacted by Superstorm Sandy. To obtain this extension, community water systems in the counties of Bronx, Kings, Nassau, New York, Queens, Orange, Putnam, Richmond, Rockland, Suffolk, Sullivan, Ulster, and Westchester were required to notify their respective City/County health department or State District Office prior to January 1, 2013.

E. On-Site Waste Treatment Systems (OWTS) plans, policy, and design

STATUS: Staff attended the State Onsite Regulators Alliance national conference in Washington D.C. in July 2013.

- 2. Continue to assess whether community groundwater systems may be under the influence of surface water. During each reporting year, make significant progress toward completion of assessments and/or compliance (approximately 50 Community Wells/year).**

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STATUS: Staff continue to make progress on GWUDI assessments. While the number of wells in need of determinations has substantially shrunk in recent years, Hurricane Irene and Tropical Storm Lee's impact on stream courses and local hydrology created a significant number of drinking water sources with new risks for surface water influences. New screening criteria were developed and determination studies were conducted accordingly.

The status of GWUDI determinations are:

Negative determinations completed=11,287

Positive determinations= 404

Not addressed=1,130

- 3. Continue to implement the State's Capacity Development Program including submitting the Annual Capacity Development Report to the U.S. EPA by December 31st of each year, and submitting the triennial Report to the Governor by September 30, 2014.**

STATUS: Implementation of the State's Capacity Development Program based on the Capacity Development Strategy approved by the USEPA on September 29, 2000 is ongoing. The Annual Capacity Development Report for FFY 2013 is under review for final management approval and is anticipated to be submitted to USEPA by December 31, 2013. NYSDOH is in the beginning stages for the preparation of the triennial assessment report on the Department's capacity development efforts and the report must be submitted to the Governor by September 30, 2014. In July 2012, NYSDOH received a request from New York Rural Water Association (NYRWA) to provide at least three 6-hour CUPSS training sessions for operators and circuit riders. In 2013, NYSDOH partnered with NYRWA to provide two training sessions.

- 4. Continue to implement the Source Water Assessment and Protection Programs by:**

- A. Reviewing and updating, as appropriate, approximately 50 new/existing source water assessments annually.**

STATUS: Source water assessments are updated through SDWIS as part of sanitary surveys that include a source water evaluation. Procedures are in place to ensure that an initial source water assessment is prepared at water systems that are developing new sources.

- B. Updating or preparing a Source Water Assessment Plan summary report where needed.**

STATUS: No Source Water Assessment Plan summary reports were requested during the reporting period. Over 40 requests for drinking water and source water assessment information were filled. Requests for information about public water sources and assessment areas near proposed new and expanded natural gas pipeline routes were received during the reporting period. Federal regulations require companies to get information about drinking water sources and assessment areas near pipeline routes.

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- C. Continuing to provide support to local health departments and communities in developing a source protection/well head protection program that incorporates the source water assessment.

STATUS: Staff continues to provide guidance on using source water assessment reports and conducting source water protection activities including well head protection.

- D. Ensuring that public water systems that draw water from the Hudson River are properly monitored and protected during and after the Hudson River PCB dredging project.

STATUS: Sampling of public water systems that use the Hudson River as a source of drinking water took place during the 2013 dredging season. Forty-five (45) raw and finished drinking water samples were collected for polychlorinated biphenyl (PCB) analysis from the following public water systems: Green Island (13 samples), Rhinebeck (8 samples), Port Ewen (8 samples), Bethlehem (8 samples) and Poughkeepsie (8 samples). All of these samples were found to have a PCB concentration less than the federal and State drinking water standard of 500 nanograms per liter (ng/L). Phase 2 of the Hudson River dredging project is scheduled to continue until 2016.

- E. Continue to perform security inspections of public water systems when needed in response to security issues. Perform security assessments, at least once per quarter, for volunteer systems to help improve individual system security and promote an improved security culture.

STATUS: The BWSP conducted one limited security inspection at the New York City water system. The field visit was done on October 22, 2012 with a follow-up letter sent to NYC DEP on December 17, 2012. The visit focused on alleged deficiencies that had been noted in an anonymous complaint letter from a NYC watershed police officer.

Field and Bureau personnel include review of security components during sanitary surveys and other water system inspections (e.g., completed works inspections).

GOAL 4: ASSURE THAT POTABLE DRINKING WATER IS PROVIDED DURING EMERGENCIES.

1. Assure potable water is provided during water supply emergencies by:

- A. Responding to requests for technical assistance in times of emergencies, including coordinating with the State's Office of Emergency Management (OEM) for the release of stockpile equipment (estimate 20 incidents). This includes the preparation and issuance of appropriate problem alerts.

STATUS: Problem alerts were prepared by Field and Bureau staff as required. Fifty-nine (59) problem alerts were issued. These do not include the many water system emergencies noted above that were associated with Superstorm Sandy.

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Eighteen (18) requests for release of emergency drinking water equipment from the State's stockpiles were approved. These included tanks, tankers, filters and pumps.

The BWSP continues to work with NYSOEM to procure and maintain appropriate equipment for water supply emergencies at the State stockpiles. The BWSP is also coordinating potential involvement of leaders from NYWARN in the upkeep and maintenance of the emergency stockpile water equipment.

- B. Preparing a summary report of emergencies during the reporting year and submitting a copy to EPA Region 2.

STATUS: The BWSP submitted the "Public Water Systems Emergency Report" for calendar year 2012 to USEPA Region 2 on December 20, 2013.

- C. Promoting mutual aid between water utilities, including supporting the NY State Water/wastewater Agency Response Network (NYWARN), providing information to the regulated community about mutual aid and NYWARN, and incorporating NYWARN into appropriate training opportunities state wide.

STATUS: BWSP manages a small contract with the NY Section of the American Water Works Association (NY-AWWA) for promoting NYWARN. NY-AWWA promotes NYWARN by publishing articles about NYWARN, providing training, and outreaching at water conferences. BWSP participated in several meetings with NYWARN leaders related to expanding NYWARN capabilities. The BWSP is helping to coordinate with NYSOEM and NYWARN a place for active involvement of NYWARN at the NYSEOC during emergency activations.

- D. Assuring that certified bulk and/or bottled water is available when necessary.

STATUS: The BWSP maintains up to date contact information for certified bulk haulers and bottled water producers, and provides this information on its public web site at: http://www.health.ny.gov/environmental/water/drinking/bulk_bottle/. The use of these sources during emergencies is covered by BWSP guidelines for community water system emergencies, and is overseen by LHD staff. In addition potable water tankers are kept ready and available by the NYSOEM in coordination with the BWSP. During this reporting period there was no use of these emergency tankers.

GOAL 5: ASSURE THAT EMERGING ISSUES IN WATER SUPPLY REGULATIONS ARE EFFECTIVELY REVIEWED AND INNOVATIONS IN WATER SUPPLY DELIVERY ARE PROMOTED, AS WELL AS INCREASING THE TECHNICAL COMPETENCE AMONG REGULATORY AND OPERATIONAL STAFF.

1. Assure staff are properly trained by holding quarterly Bureau-wide meetings, attendance at the New York Section of the American Water Works Association (NYAWWA) and New York Rural Water Association (NYRWA) training sessions and

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other specific local, state and national conferences, including (American Water Works Association's National Conference, Association of State Drinking Water Administrators' National, Member, and Work Group Meetings, New England Interstate Water Pollution Control Commission, Association of Board Certification).

STATUS: Meetings and remote conferences were held on a regularly scheduled basis to present or review regulatory issues and help develop and maintain standardization and efficient program delivery. These included weekly BWSP program managers meetings, bi-weekly conference calls with regional environmental health directors, quarterly BWSP staff meetings, and conference calls with regional water field coordinators. Program initiatives were presented to BWSP staff and to field staff thru these various venues, including, attendance at the spring meetings of the Conference of Environmental Health Directors. Though significantly reduced due to travel restrictions, BWSP and field staff participated in key conferences including the spring conferences of the NY section of the American Water Works Association (AWWA), and the NY Rural Water Association. Several local Waterworks Association and Rural Water sessions were attended by field staff, often to deliver program presentations. Participation at various national workgroup meetings was accomplished through conference calls. BWSP staff also participated at the following conferences/workshops: State Onsite Regulator Alliance Conference (July 2013); Medium Pressure UV Disinfection Guidance Document Workshop (July 2013); Quality Assurance Auditor Training Workshop (September 2013); EPAs Small Drinking Water Systems Workshop (September 2013); EPAs All-Hazard Training for the Water Sector (September 2013).

2. Assure that water systems are operated by competent operators by:

A. Certifying new operators (50)

STATUS: 300 new operators were certified during this reporting period

B. Renewing operator certifications (1,000)

STATUS: 1,908 operator certifications were renewed.

C. Reviewing and endorsing operator certification courses (20)

STATUS: 76 operator certification courses were reviewed and endorsed.

D. Reviewing and approving operator renewal training courses (100)

STATUS: 1,058 operator renewal training courses were reviewed and approved.

E. Developing and implementing regulatory changes to standardize operator certification training provider approvals

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STATUS: The BWSP developed proposed standards for delivery of certification training and most training providers are meeting these proposed standards voluntarily. Regulatory changes to require training providers to meet the proposed standards were initiated in 2007 but are on hold due to other priorities.

3. Assure that cross connection control programs at water systems are maintained by competent back flow prevention testers by:

- A. New certified back flow prevention testers (25)

STATUS: 391 new certified back flow prevention testers.

- B. Renewing back flow prevention testers (500)

STATUS: 542 renewals for back flow prevention testers.

4. Conduct basic Environmental Health Course Water Supply 109 module at three locations each year for new state and county staff.

STATUS: The water supply module of the Basic Environmental Health Course for new staff was held on October 23 - 24, 2012 in Rensselaer, NY.

5. Continue participation in Child Health Initiative by assisting EPA with collection and analysis of lead samples from school drinking water outlets in selected cities around the state.

STATUS: BWSP staff continued to assist USEPA Region 2 in providing technical assistance at the Yonkers Public Schools through participation in conference calls, compiling and analyzing the sampling data, and providing technical assistance to the school district during implementation of the program.

6. Actively seek additional funding to conduct relevant research.

STATUS: Research scientist staff continued to seek additional funding sources to conduct relevant drinking water quality research as detailed below:

CDC EHS-Net Research: Staff continued work on two Centers for Disease Control and Prevention (CDC) grants in this reporting period. One was entitled "Revitalizing Core Environmental Health Programs through the Environmental Health Specialists Network (EHSNet) Research" and the second was a proposal focused on the delivery of environmental health services (i.e. practice). Both awards originally were made in July 2010. Grant renewals for 2013-2014 were submitted and approved (\$175,000 for research and 50% of a \$150,000 practice grant written with our State food partners.); we are currently finishing year four of our second five-year cycle. Renewals for the final year of the cycle will be prepared in early 2014.

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As part of the CDC agreement, staff has continued to implement the use of computational fluid dynamics for checking disinfection components during design review. In addition, a manuscript has been prepared that is related to an advanced analysis of baffle factors for disinfection vessels.

Under the EHS-Net grant a pilot study looking at pharmaceuticals and personal care products Associated with on-site septic systems was completed in September 2013; laboratory results (septic effluent, near-shore lake samples and drinking water) for both the 2012 and 2013 seasons have been received from the Wadsworth Center and are currently being reviewed and discussed. Preparations are being made for the cooperative completion of a publishable manuscript. In addition, Research Scientist staff were awarded \$20K from CDC for work related to Great Lakes initiatives. The monies will be earmarked for continued sampling of harmful algal blooms in the late Spring and early Summer 2014.

Staff were awarded \$172K/year for a cooperative agreement entitled "Improving New York State Capacity to Assess Wells and Small Drinking Water System." This initiative related to private well inventory and vulnerability was awarded 09/03/2013. Renewal is anticipated for at least a second year (through 08/31/2015).

The five year CDC Cooperative agreement for Harmful Algal Bloom (HAB) activities ended on September 30, 2013. The BWSP was granted a three month no cost extension. During this reporting period presentation on HABs in connection with this grant were made at: The North American Lake Management Society's international symposium, the NYS Federation of Lake Associations' annual conference, the NYC Watershed Tifft Science and Technical Symposium, and a number of co-sponsored events with the NYS Department of Environmental Conservation to present HABs and ambient water numeric nutrient criteria to regional staff and water suppliers. As part of the CDC HAB grant, staff focused on sampling of microcystin levels in finished drinking water from public supplies using surface water sources with known histories of HABs before, during, and after blooms. Staff will use this information to develop a response protocol for public supplies using surface waters. The BWSP is seeking additional funding to continue and expand this and related work.

GOAL 6: EFFECTIVELY ADMINISTER THE PUBLIC WATER SYSTEM SUPERVISION PROGRAM.

- 1. Ensure all EPA reporting requirements under the grant are met and EPA proposal for regulations and policies are promptly commented upon as requested.**

STATUS: Reporting requirements for the FFY 2012 PWSS Grant were fully met, and this report completes the reporting requirements for FFY 2013. The BWSP provides appropriate input on proposed USEPA regulations and policy matters as they arise.

- 2. Continue to promote need for adequate resources to implement full water supply regulatory program, including appropriate budget proposals and personnel management.**

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STATUS: The program has continued its efforts to maintain adequate budget support while participating in the State and Department's budget austerity initiatives. The Drinking Water Enhancement grant program for county health departments continued during state fiscal year 2013 with an allocation of \$5,013,000.

3. Ensure overall program coordination with Federal and State agencies.

STATUS: A revised PWSS grant agreement for FFY's 2011 – 2014 was submitted to USEPA in July 2013. The first portion of the PWSS grant award for FFY 2014 has not yet been received.

4. Submit to EPA a status report or work plan achievements at MID and END of year.

STATUS: The mid- year status report documenting PWSS grant work plan activities completed during the first half of FFY 2013 was submitted to USEPA Region 2 on July 26, 2013. This end-of-year status report documents work plan achievements for FFY 2013, October 1, 2012 through September 30, 2013.

NYC Compliance and Watershed Program

1. Continue to track New York City (NYC) avoidance compliance by:

A. Providing daily oversight of the City's compliance with all avoidance deliverables.

STATUS: BWSP staff continued to review and respond accordingly to all Filtration Avoidance Determination (FAD) deliverables. Staff conducted the Annual On-Site Inspection of the NYC Catskill and Delaware Water Supply System and prepared the 2012 Annual On-Site Inspection Report, which evaluated the watershed control program and disinfection facilities for this filtration avoidance system. The BWSP issued a Notice of Violation to the NYC water system due to their source water exceeding 5 NTU on October 29, 2012. The exceedance was a result of high winds from Hurricane Sandy. The system switched the supply to by-pass Kensico Reservoir, and turbidity returned to <5 NTU after 105 minutes. BWSP required an After Action Report be submitted by NYCDEP after a slug of sediment entered the system at the Catskill Connection Chamber (CCC) on July 1, 2013. The intrusion occurred because facilities under construction at the CCC were inadequately protected against storm water runoff. Turbidity in the finished water peaked at 8.2 NTU downstream at Shaft 19, but had diminished to 2.3 NTU by the time the water reached Hillview Reservoir. Chlorine levels were increased to ensure adequate CTs were achieved. Staff have followed up to ensure that corrections are being made at the CCC to prevent a reoccurrence of this incident. Additional FAD oversight was provided through field visits to the watershed during the reporting period, in particular to project sites for the Stream Management Program and an inspection of Catskill Aqueduct leaks. Staff also attended the 2013 Watershed Science and Technical Conference – NYCDEP's participation in this conference is a FAD deliverable.

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- B. Participating in the City's Agricultural Program by participating on the Watershed Agricultural Council.

STATUS: Due to State travel restriction staff did not participate on the Watershed Agricultural Council (WAC) during the reporting period. However, BWSP staff reviewed activities of the Watershed Agricultural Program as reported in the New York City Department of Environmental Protection's (NYCDEP's) annual FAD report.

- C. Work jointly with USEPA to assure the Hillview Reservoir covering project is in accordance with Administrative Orders.

STATUS: Staff participated, with EPA, in an inspection to review water quality protection measures around Hillview Reservoir. In addition, the BWSP reviewed monthly reports on NYCDEP's activities to monitor and deter wildlife in and around Hillview Reservoir. These wildlife management reports are requirements of the Hillview Reservoir Administrative Order. The next milestone date for the Hillview Reservoir Administrative Order is January 31, 2017.

- D. Provide oversight and liaison with all "Parties" to ensure implementation of the New York City Memorandum of Agreement (NYC MOA), including participation in the various MOA Committees.

STATUS: The BWSP continued to participate in various committees including: the Wastewater Watershed Enforcement Coordination Committee; the Stormwater Watershed Enforcement Coordination Committee; and the Recreational Boating task force. The latter group oversaw expansion of a pilot program to allow recreational boating on Pepacton, Neversink, and Schoharie Reservoirs, in addition to Cannonsville Reservoir. Staff participated in meetings involving USEPA, NYSDEC, New York State Department of State, NYCDEP, the Coalition of Watershed Towns, the Catskill Watershed Corporation, and watershed county representatives to help develop a NYC Watershed Local Flood Hazard Mitigation Program after the flooding and devastation brought on by Hurricane Irene and Tropical Storm Lee in 2011. Staff attended the annual meeting of the Catskill Watershed Corporation.

- E. With issuance of the final Catskill/Delaware Filtration Avoidance Determination (FAD) (July 2007), NYSDOH, having been delegated primacy, will work collaboratively with Region 2 in the oversight of the FAD.

STATUS: Since the transfer of primacy for oversight of the FAD under the Surface Water Treatment Rule, NYSDOH has continued to collaborate with USEPA on the oversight of the FAD. During the reporting period, NYSDOH, in consultation with USEPA, conducted activities related to revising the 2007 FAD to develop program requirements for the Second Five-Year Period of the FAD. In addition, USEPA participated with the BWSP in the Annual On-Site Inspection of the Catskill and Delaware Water Supply System, and NYSDOH has coordinated with USEPA in commenting on FAD deliverables and overseeing Cat/Del UV validation testing.

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- F. Ensure that the Croton Water Treatment Plant (filtration) remains on schedule.

STATUS: Construction of the Croton water filtration plant (WFP) has been delayed due to a number of circumstances, as described in NYCDEP's monthly progress report for the Croton Consent Decree. NYSDOH has participated with USEPA and NYCDEP in discussions on revised milestones for completion of the plant, which would accommodate these delays and provide adequate time for WFP testing, start up and operation; however, revised milestones were not finalized during the reporting period. NYSDOH reviews progress of the construction of the Croton WFP through monthly reports submitted by NYCDEP and periodic visits to the construction site to help ensure that NYCDEP is expediting construction, to the extent practicable. NYSDOH continued to participate in Croton Regulators' meetings and to work with NYCDEP by reviewing start up procedures. NYSDOH and NYCDOHMH provided oversight on disinfection of the WFP facilities to ensure procedures were completed in accordance with engineering standards.

- G. Ensure that the Cat/Del Ultraviolet (UV) light disinfection facility remains on schedule.

STATUS: BWSP continued to participate in bi-monthly UV facility construction progress meetings. During the reporting period, NYSDOH did a site inspection of additional UV validation testing being performed on the UV reactor model that has been installed at the Catskill/Delaware UV (CDUV) facility, reviewed validation results, and met with NYCDEP and their consultants to discuss results of additional testing. In accordance with the CDUV Administrative Order on Consent, the CDUV facility came fully on-line by December 1, 2012 treating Catskill/Delaware water with a UV dose of 40 mJ/cm².

- H. Assure that the adoption of amendments to the New York City Watershed Rules and Regulations by the State occurs in a timely manner.

STATUS: Amendments to the New York City Watershed Rules and Regulations were formally adopted into the Rules of the City of New York and became effective in the watershed on April 4, 2010. The documents required by the State Administrative Procedures Act (SAPA) in order to adopt these Watershed Regulations into NYS code have been submitted to the State Regulatory Affairs unit and are currently under review by the NYSDOH Division of Legal Affairs staff.

- I. Oversee development of and finalize the mid-term revisions to New York City's 2007 Filtration Avoidance Determination (FAD).

STATUS: Staff completed drafting the mid-term revisions to NYC's 2007 FAD. Program requirements for the Second Five-Year Period of the FAD reflect NYCDEP's 2011 Long-Term Watershed Protection Plan and the results of discussions among NYSDOH, USEPA, NYSDEC and NYCDEP. The final draft revised 2007 FAD was released to the public for review in August 2013. A 45-day public comment period was provided, which was subsequently extended another 30 days in response to requests from the public. The comment period ended November 15, 2013.